

# C&D Materials Management Program Update

MassDEP SWAC Meeting

Via Zoom Webinar

June 22, 2023



# **C&D MINIMUM PERFORMANCE STANDARD (MPS)**

# C&D Minimum Performance Standard Goals and Objectives

Simply put...

***Ensure that every ton of C&D debris is processed at an MPS-compliant facility***

- Level the playing field for all facilities
- Recover maximum value from recyclable/re-usable materials
- Separate all waste ban materials
- Minimize tonnage sent for disposal – “Reduce Leakage”

Launched MPS 1/01/2020

# C&D MPS Performance Criteria

- C&D MPS performance criteria:
  1. Achieve a 15% Process Separation Rate (PSR) minimum threshold;
  2. Demonstrate that all banned materials are separated to the greatest extent possible.
- Failure to satisfy either performance criterion constitutes a failure to comply with Waste Ban Regs and Waste Ban Compliance Plan
  - Cannot dispose or arrange for disposal of any C&D materials

Note: The MPS performance criteria are not applicable to a C&D Transfer Station that operates as follows:

- Transfers all C&D materials to an MPS-compliant facility for further processing
- Separates clean gypsum wallboard and Zero-Tolerance waste ban items **prior to transfer [emphasis added]**

# CY2022 C&D Facility MPS Compliance

## 18 C&D Processors

- 9 facilities MPS compliant
- 9 facilities Conditionally MPS compliant
  - 6 failed to meet 15% PSR
    - 2 optimizing new process lines
    - 1 lost supply of source separated ABC after change of ownership
    - 3 impacted by wood market disruption
  - 5 failed to recycle/divert clean gypsum wallboard
    - 2 overlap with above for failure to meet 15% PSR
    - 4 reported separating and storing CGW onsite

## 11 C&D Transfer Stations

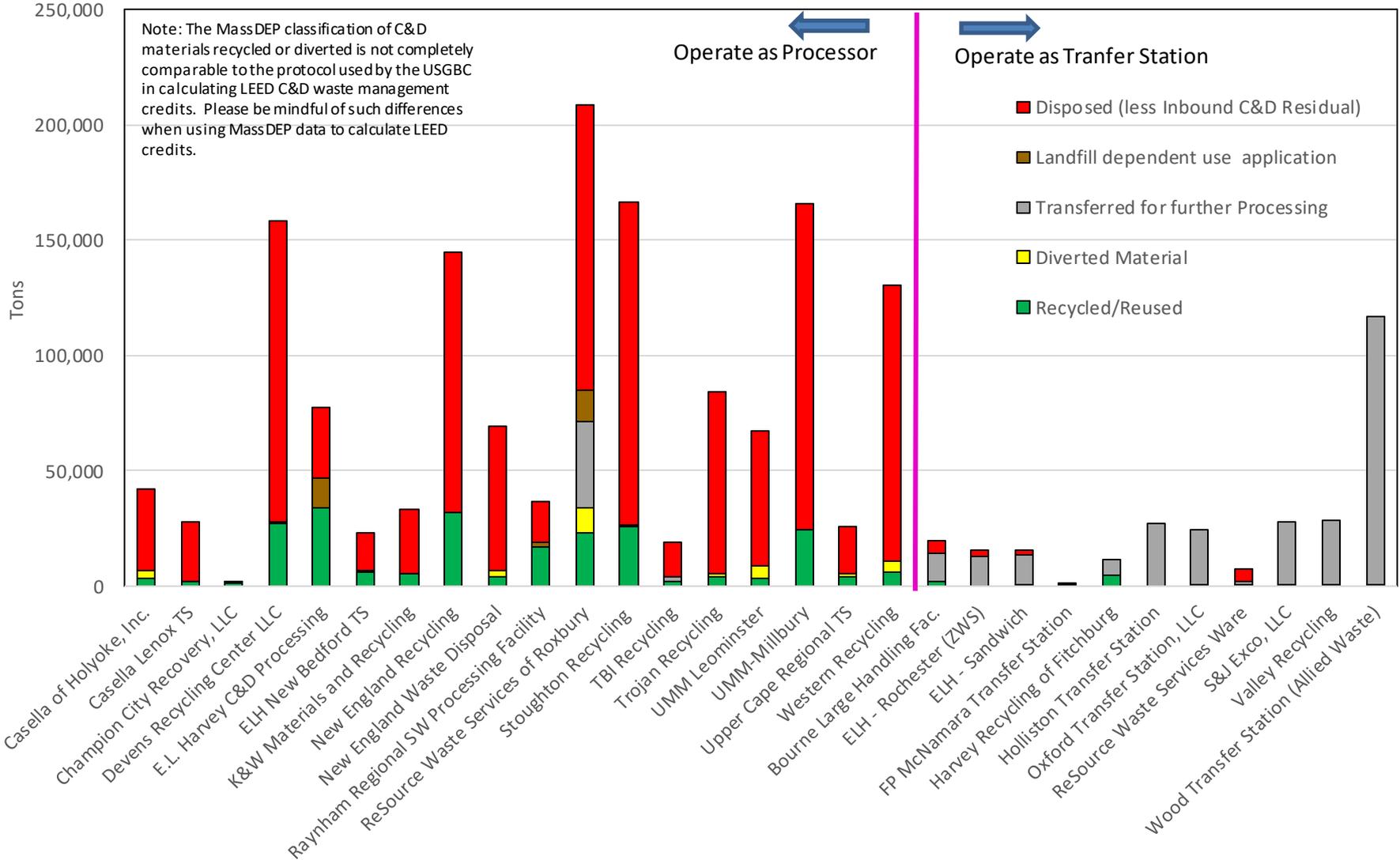
- 5 facilities MPS compliant
- 6 facilities MPS compliance could not be confirmed
  - did not report separating any clean gypsum wallboard prior to transferring unprocessed and partially processed C&D materials for further processing
  - MassDEP conducting follow-up inspections

CY2022 C&D Facility MPS Compliance Status Report (May 2023)

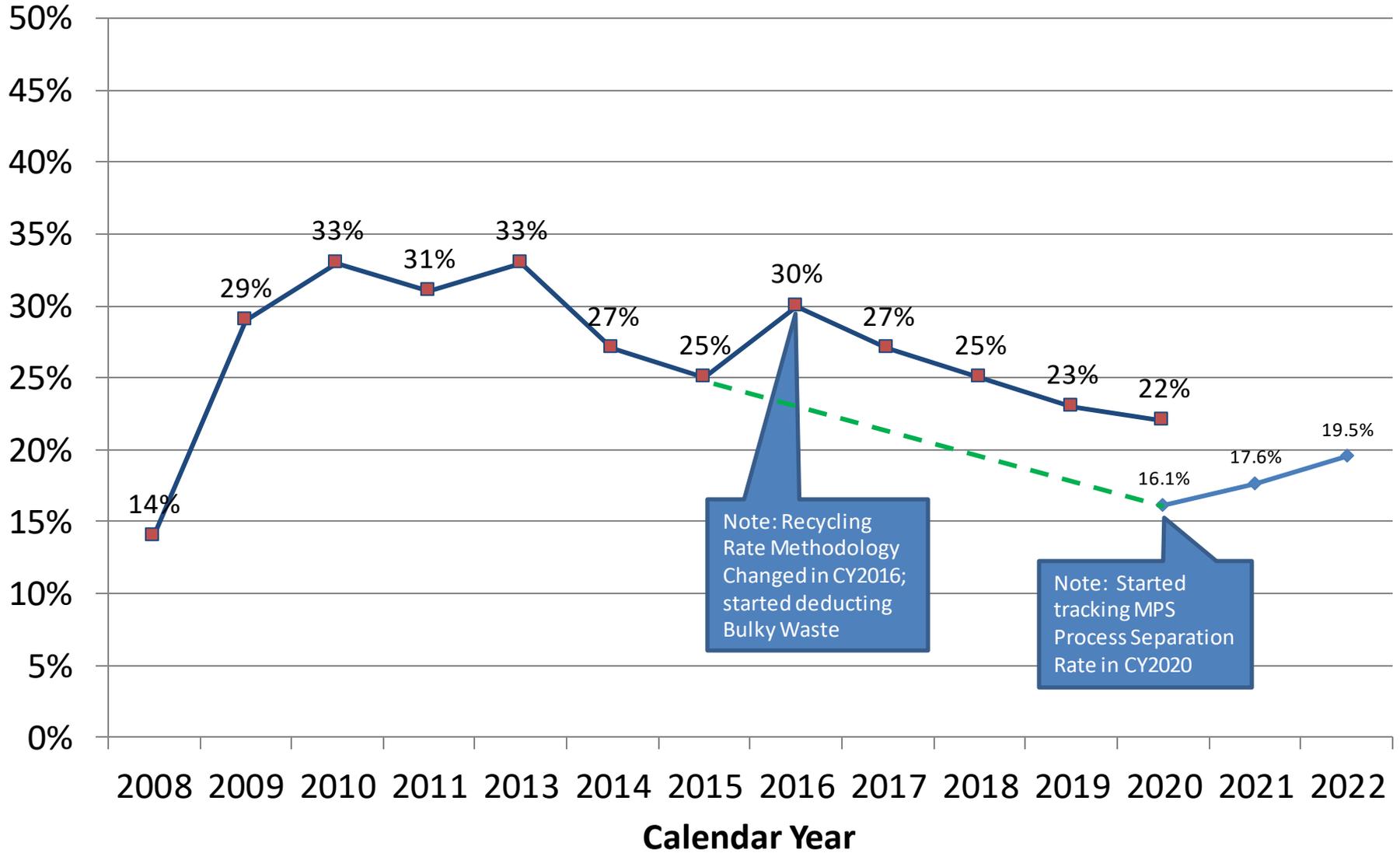
<https://www.mass.gov/doc/status-of-facility-compliance-with-cd-minimum-performance-standard-may-2023/download>

# - Massachusetts C&D Handling Facilities - Disposition of C&D Materials Handled by Facility in 2022\*

\*Quantities are "as reported" to MassDEP in CY2022 C&D Annual Facility Reports

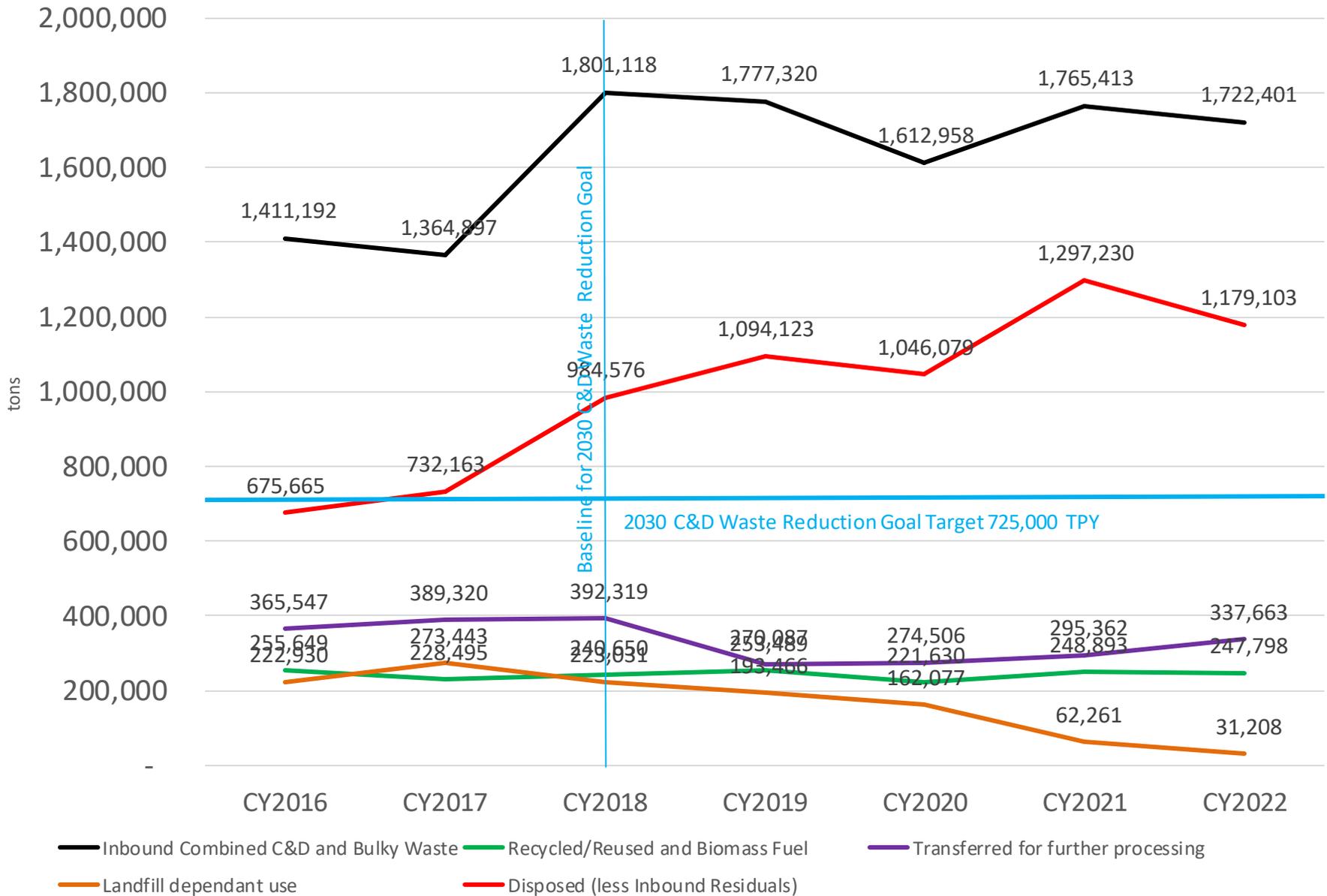


# C&D Industry Recycle Rate/Process Separation Rate Trend Chart



■ Historic C&D Recycle Rate    ◆ MPS Process Separation Rate

Trend Plot of Outbound/Inbound C&D Materials vs. 2030 Waste Reduction Goal

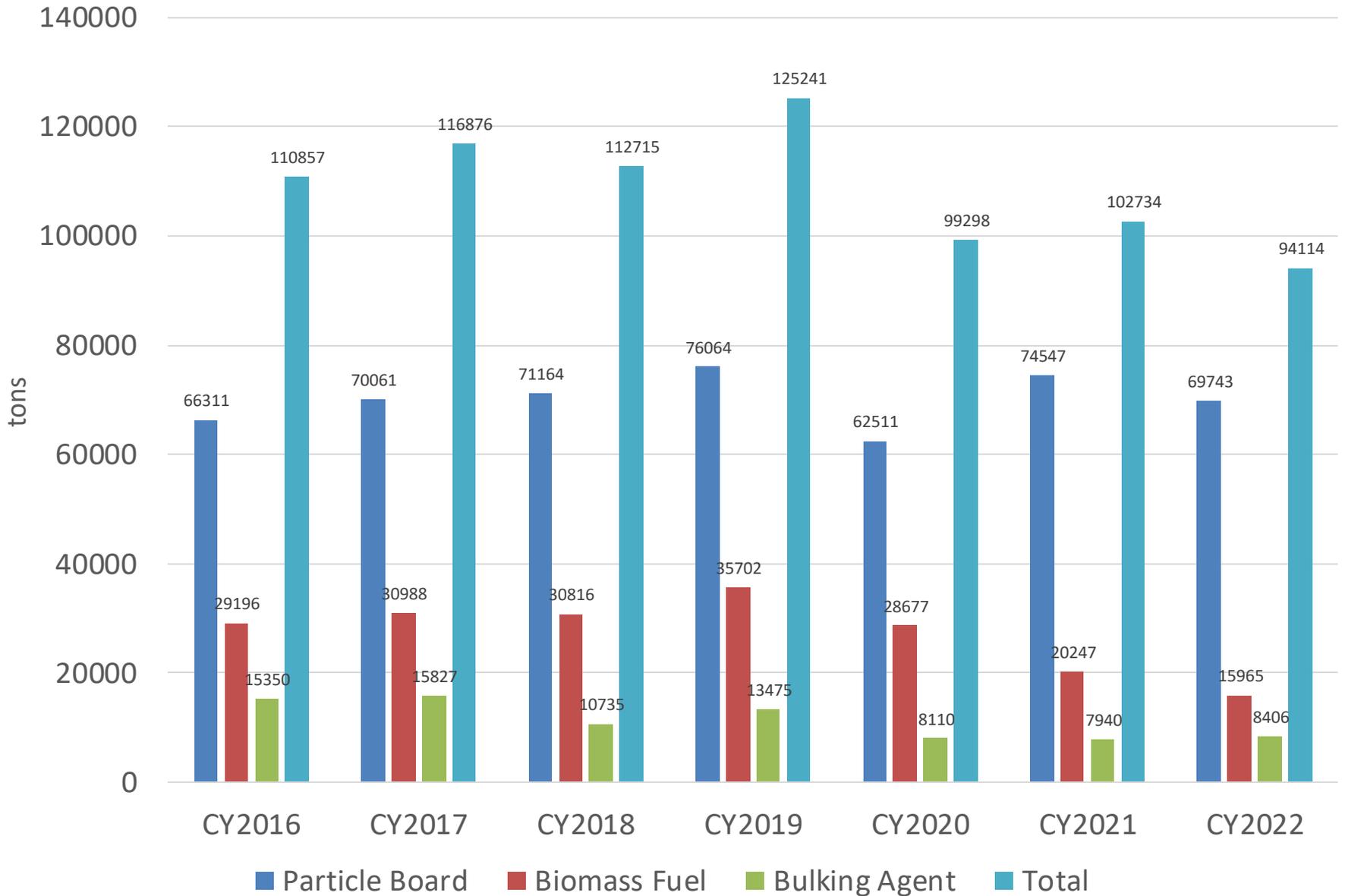


# **WOOD MARKETS**

# CY2022 C&D Wood Market Disruption

- PRE-Greenleaf, Plainfield, CT (Biomass Boiler)
  - Major outlet for “A-wood” produced in MA
  - Turbine failure caused unscheduled shutdown (5/27/2022)
  - Turbine Repair completed early March 2023
  - Resumed full operation late March 2023
- Impact on C&D Program
  - Affected 5 C&D Handling facilities (2 owners)
  - MassDEP issued temporary waste ban waivers
    - Allowed disposal of limited quantities of wood
    - Required maximum use of existing markets and continual search for new markets

# Wood Products Trend Chart 2016-2022





- 20th year of recycling C&D wood chip (2 million tons)
- Particle board production tracks construction market activity
- Currently operating at full capacity; purchase of recycled wood chip has not slowed down despite logistical challenges (e.g., trucking)
- Tafisa reports a decline in the product quality of the feedstock (e.g., excessive ferrous and nonferrous metal content); attributed to staff turnover due to vertical integration of regional C&D industry
- Improved feedstock quality translates to increased capacity at end-market

## PLAINFIELD RENEWABLE ENERGY

- Fully operational since late March-2023
- Expect to run continuously until scheduled 2-week maintenance shut-down (October-2023)
- Future looks good – PRE has changed its mix and increased C&D wood chip by about 10% (40:60 blend of green wood chip to C&D wood chip)



<https://greenleaf-power.com/plainfield/>



- Tred'si specializes in processing treated wood (e.g., railroad ties, utilities poles, etc.)
- Preference for longer poles
- Transportation and logistics can be challenging
- Trying to increase capacity for product brought in by rail



# Our Cogeneration Plant

Every year we repurpose 90,000 tonnes of wood used as biomass to produce 9.75 Megawatts of electricity every day. That is the equivalent of the electricity supply for 4 500 single-family homes in Quebec.

RECYCLING, IT DRIVES US!

OUR COGENERATION PLANT

WE RECYCLE TREATED WOOD

- JPB is another outlet for wood in Québec, a large cogen plant in Salaberry-de-Valleyfield
- Repurposes 90,000 TPY of wood as biomass fuel
- Not currently used by Massachusetts C&D processors

# C&D Program Resources

The following resources can be found on the MassDEP C&D materials management webpage: <https://www.mass.gov/lists/managing-construction-demolition-cd-wastes>

- C&D Action Plan (March-2023 Update): <https://www.mass.gov/doc/cd-action-plan/download>
- Minimum Performance Standard for C&D Handling Facilities: <https://www.mass.gov/doc/minimum-performance-standard-for-construction-demolition-handling-facilities/download>
- C&D MPS Q&A Guidance: <https://www.mass.gov/doc/frequently-asked-questions-faq-minimum-performance-standard-for-cd-handling-facilities/download>
- Status of Facility Compliance with MPS (May 2023): <https://www.mass.gov/doc/status-of-facility-compliance-with-cd-minimum-performance-standard-may-2023/download>
- C&D handling facilities: disposition of materials handled (CY2022): <https://www.mass.gov/doc/2022-annual-cd-report-data-summary/download>
- MassDEP Construction & Demolition Subcommittee webpage: <https://www.mass.gov/service-details/massdep-construction-demolition-subcommittee>

# For More Information:

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